

NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

ANALYSIS OF THE MEDICAL AUGMENTATION PROGRAM

by

John R. Boufford

March 1997

Thesis Co-Advisors:

Alice Crawford

James A. Scaramozzino

Approved for public release; distribution is unlimited.

19971125 009

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE March 1997		3. REPORT TYPE AND DATES COVERED Master's Thesis
4. TITLE AND SUBTITLE ANALYSIS OF THE MEDICAL AUGMENTATION PROGRAM			5. FUNDING NUMBERS	
6. AUTHOR(S) Boufford, John R.				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) This thesis reviews medical readiness in the U. S. Navy. Data from multiple sources were used to analyze medical readiness issues. Analysis shows that Navy medical readiness needs to improve. Recommendations address the formulation of a readiness organization within the Military Treatment Facility (MTF). This organization would utilize the existing MTF organization and provide continuity, command involvement, and a means for continuous improvement.				
14. SUBJECT TERMS Medical Readiness, Medical Augmentation Program, OCONUS, MTF, DTF			15. NUMBER OF PAGES 72	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18 298-102

Approved for public release; distribution is unlimited.

**ANALYSIS OF THE MEDICAL
AUGMENTATION PROGRAM**

John R. Boufford
Lieutenant Commander, United States Navy
B.S., Eastern Michigan University, 1982

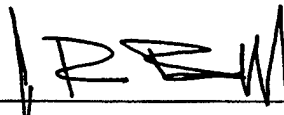
Submitted in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

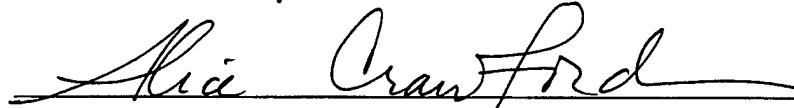
from the

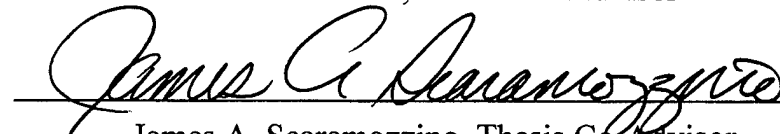
**NAVAL POSTGRADUATE SCHOOL
March 1997**

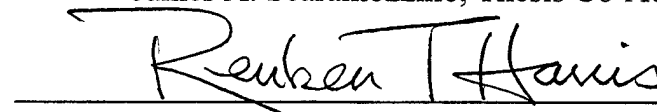
Author:


John R. Boufford

Approved by:


Alice Crawford, Thesis Co-Advisor


James A. Scaramozzino, Thesis Co-Advisor


Reuben T. Harris, Chairman

Department of Systems Management

ABSTRACT

This thesis reviews medical readiness in the U. S. Navy. Data from multiple sources were used to analyze medical readiness issues. Analysis shows that Navy medical readiness needs to improve. Recommendations address the formulation of a readiness organization within the Military Treatment Facility (MTF). This organization would utilize the existing MTF organization and provide continuity, command involvement, and a means for continuous improvement.

TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	BACKGROUND	1
B.	MEDICAL READINESS	2
1.	Wartime/Contingency	2
2.	Day-to-Day Operational Support	3
3.	Peacetime Health Benefit	3
C.	DEPARTMENT OF DEFENSE READINESS STRATEGY	4
1.	Medical Readiness Strategic Plan (MRSP) 2001	4
2.	Medical Readiness Skills Training	5
D.	MEDICAL AUGMENTATION PROGRAM	6
E.	OBJECTIVE AND RESEARCH QUESTIONS	7
F.	SCOPE	8
G.	ORGANIZATION OF STUDY	8
II.	MILITARY MEDICINE IN A COMBAT SETTING	11
A.	LEVELS OF CARE	11
B.	MILITARY MEDICINE	13
C.	GENERAL ACCOUNTING OFFICE REVIEW OF OPERA- TION DESERT STORM AND IMPROVEMENTS REQUIRED IN THE NAVY'S WARTIME MEDICAL CARE PROGRAM	15

1.	Preparation for Assigned Missions	15
2.	Deployment and Assignment of Medical Personnel	16
3.	Training	17
4.	Equipment	18
D.	SUMMARY	19
III.	EVALUATION OF THE MEDICAL AUGMENTATION PROGRAM	21
A.	DESCRIPTION OF THE MEDICAL AUGMENTATION PROGRAM	22
1.	Personnel Readiness	25
2.	Training	26
3.	Activation of the MAP	27
B.	ANALYSIS OF THE MEDICAL AUGMENTATION PROGRAM	28
1.	Assessment of Military Leadership	28
2.	Readiness Data	31
C.	NAVAL MEDICAL CENTER MEDICAL MOBILIZATION OFFICER INTERVIEW	38
1.	What are the processes for assessment and tracking of C-status/T- status in regards to the five requirements as set forth in the MAP?	38

2.	What are the current relationships between MEDMOB, Operational Platforms, Department Heads, the Commanding Officer and the Operational Readiness Quality Management Board (QMB)?	40
3.	What are the responsibilities and chain of command for each operational group as it pertains to readiness? Do any policies, guidelines, or instructions delineate accountability?	41
D.	NAVY MEDICINE COMMAND READINESS INITIATIVES	42
E.	SUMMARY OF ANALYSIS	44
IV.	CONCLUSIONS AND RECOMMENDATIONS	47
A.	CONCLUSIONS	47
B.	RECOMMENDATIONS	49
1.	Decentralize the Medical Readiness Process at the Command Level	50
2.	Assign a Platform Operations Officer along with a Senior Officer to Each Operational Platform Group the Command Supports	52
3.	Establish a Quality Management Board (QMB) That Represent the Positions Responsible for the Readiness Process	53
4.	Develop a Comprehensive Platform Indoctrination	53
5.	Every Command Promulgate its Own Operational Readiness Instruction	55
C.	SUMMARY	55

LIST OF REFERENCES	57
INITIAL DISTRIBUTION LIST	59

LIST OF TABLES

Table 1.	C-Status Readiness Percentages	25
Table 2.	T-Status Readiness Percentages	27
Table 3.	Personnel Readiness Surveyed by Jacksonville HSO, 1995	32
Table 4.	Training Status Surveyed by the Jacksonville HSO, 1995	32
Table 5.	Hospital Ship Training Requirement and Percent Trained in 1996 Compared with GAO Report, 1993	35
Table 6.	Fleet Hospital Training Requirement and Percent Trained in 1996 Compared with GAO Report, 1993	36
Table 7.	Fleet Marine Force Training Requirement and Percent Trained, 1996	37

I. INTRODUCTION

A. BACKGROUND

Navy Medicine's primary mission, and most important responsibility, is to provide combat-ready professional medical personnel to support the operational forces of the Navy and Marine Corps team. It is imperative that those designated to support operational forces receive appropriate readiness skill training to meet the mission of the platform to which they are assigned. [Ref. 1] Navy Medicine must be prepared to respond effectively and rapidly to the entire spectrum of potential military operations, from multiple Major Regional Contingencies (MRC) to Operations Other Than War (OOTW).

Preparing medical department personnel for the special needs of operational medicine involves education and training beyond that of traditional medicine in a peacetime setting. This is known as medical readiness training. Navy medicine, by virtue of its primary mission, must continuously engage in medical readiness training. The program that provides policy and procedures for this is the Department of the Navy, Bureau of Medicine and Surgery (BUMED), Medical Augmentation Program. The purpose of this thesis is to examine this program, determine its effectiveness, and make recommendations to correct any identified deficiencies.

B. MEDICAL READINESS

The Department of Defense (DoD) defines medical readiness as

the ability to mobilize, deploy and sustain field medical services for any operation requiring military services; to maintain and project the continuum of healthcare resources required to provide for the health of the force; and to operate in conjunction with beneficiary health care.
[Ref. 2]

This can further be divided into Navy medicine's three missions; wartime/contingency, day-to-day operational support and peacetime health benefit.

1. Wartime/Contingency

The wartime/contingency mission is defined as providing medical care to the entire spectrum of potential military operations, from multiple Major Regional Conflicts to Operations Other Than War. The National strategy on Major Regional Conflicts is deterring and, if necessary, fighting and defeating aggression by potentially hostile regional powers such as North Korea, Iran, and Iraq. As an adjunct to our national interest, the U.S. envisions humanitarian assistance as an additional mission for the Armed Forces. Domestically, there is great uncertainty about new roles and missions the military may be assigned. The use of military resources within the United States for nonmilitary roles (e.g., Civil-Military Cooperative Action projects) is currently being tested and encouraged. The pursuit of these initiatives clearly marks departure from past requirements. [Ref. 2] This study is primarily

concerned with Navy medicine's preparation and response to the wartime/contingency mission.

2. Day-to-Day Operational Support

The day-to-day operational support mission provides active duty Navy medical personnel, or "blue suit" personnel, to support the fleet, Fleet Marine Force (FMF), and Out of the Continental United States (OCONUS) Military Treatment Facilities (MTFs)/Dental Treatment Facilities (DTFs), and to sustain the well being of the fighting force in preparation to go to war.

3. Peacetime Health Benefit

The peacetime health benefit mission provides health care to other eligible beneficiaries through the military treatment facilities and the TRICARE program.

As budgetary and legislative pressures continue "rightsizing" the Navy, Navy medicine has responded by developing the Total Health Care Support Readiness Requirements (THCSRR) model. This model allows Navy medicine to accurately determine and project its active duty manpower readiness requirements to the subspecialty level based on the first two readiness missions of Navy medicine: wartime/contingency and day-to-day operational support to the fleet and Fleet Marine Force (FMF). [Ref. 3]

C. DEPARTMENT OF DEFENSE READINESS STRATEGY

1. Medical Readiness Strategic Plan (MRSP) 2001

The Department of Defense (DoD) strategy for enhancing medical readiness to meet the defined missions is contained in the Medical Readiness Strategic Plan (MRSP) 2001. [Ref. 2] This plan provides a coordinated and synchronized approach to achieve and sustain medical readiness through the year 2001 and beyond. It is the DoD guidebook by which the services will achieve a fully capable military health care system ready to support the continuum of military operations. The MRSP is organized into nine functional areas; planning, requirements, command and control, logistics, medical evacuation, manpower, training, blood, and readiness oversight. The plan outlines the medical capability required to support the continuum of military operations. Within these functional areas it specifically lists the following required capabilities:

- Military health care providers that are physically fit to deploy, and who are highly trained in the art of military medicine.
- Military health care providers trained with the supplies and equipment of their respective deployable units.
- Military (medical and non-medical) leaders at all levels who are well founded in military medical doctrine, tactics, techniques and procedures.

- Mission capable medical units and individuals who are ready for rapid mobilization and strategic deployment to sustain medical support for any mission within the operational spectrum.
- Units with increased flexibility and mobility that can be tailored for a variety of potential missions.
- A medical evacuation system that incorporates multiple evacuation platforms into a seamless intra-and inter-theater patient evacuation system; and that employs interoperable patient movement items that function on any evacuation platform.
- Medical information management systems that accommodate command and control, medical logistics and patient accountability.
- Senior leaders who recognize advancements in medical practice and technologies and are able to provide medical care during any contingency and under the most austere conditions.

2. Medical Readiness Skills Training

To meet the unique medical training requirements associated with the MRSP 2001, DoD issued the Military Readiness Skills Training instruction. [Ref. 4] This instruction implements policy, assigns responsibilities and prescribes procedures for developing and sustaining comprehensive systems for providing, assessing, and monitoring military medical skills training essential for all military personnel, healthcare personnel and medical units. Key procedures are:

- All military personnel are expected to receive military medical skills training; however, training should be focused first on early deployers to support the major contingency plans.

- Healthcare personnel shall receive an orientation to the member's assigned billet for mobilization or deployment and an annual operational unit mission briefing. The goal is to conduct this in an environment and with the type of equipment that the member will use upon deployment.
- A healthcare provider's medical readiness status shall be included into the Centralized Credentials Quality Assurance System.
- Annual fitness reports shall include a statement of medical readiness training compliance.
- All healthcare personnel shall perform at least five days of medical readiness training annually. Training shall focus on participative, hands-on, and team building unit training, with the unit or like unit with which they are scheduled to deploy or backfill. Training shall address the individual, collective, unit and leadership skills required to perform their individual assignments.
- Medical personnel shall perform five days of medical readiness training every three years with their designated operational unit.

Each military service is responsible to further define these basic requirements to meet specific missions. Navy Medicine's medical readiness requirements are set forth within Bureau of Medicine and Surgery instruction 6440.5A. This is commonly referred to as the Medical Augmentation Program.

D. MEDICAL AUGMENTATION PROGRAM

The Medical Augmentation Program (MAP) is the crux of this study. It defines the specific, non-negotiable medical readiness training and related items applicable to Navy Medicine. The MAP instruction is designed to ensure that active

duty Navy Medical Department personnel are identified and trained to readily staff and operate operational and medical platforms supported by Navy medicine.

A substantial portion of the medical personnel requirements for the wartime mission are met through a process termed augmentation. Active duty medical personnel augment the operational and medical support units deployed in situations ranging from limited contingencies to global warfare. Peacetime staffing levels of the Fleet Marine Force, Casualty Receiving Treatment Ships (CRTS), and Out of the Continental United States Military/Dental Treatment Facilities (OCONUS MTF/DTFs) are maintained below operational staffing levels because of the difference between peacetime and wartime medical workload. Additionally, deployable medical systems such as fleet hospitals have no peacetime staffing and hospital ships maintain only a reduced operating crew during peacetime. Because of this situation, personnel who will eventually staff these platforms must be prepared to operate effectively when called upon. A more detailed description of the program is presented in Chapter III.

E. OBJECTIVE AND RESEARCH QUESTIONS

The objective of this thesis is to analyze the efficiency and effectiveness of the Medical Augmentation Program with respect to medical readiness. The level of analysis is the day-to-day management of the program. The research questions are:

1. To what extent do Navy medicine personnel meet the requirements of the Medical Augmentation Program?
2. Is Navy medicine ready to expeditiously shift from peacetime medicine to the wartime/contingency mission?
3. What changes in policy and procedures are needed to address any identified discrepancies in the program?

F. SCOPE

The scope of this study is primarily limited to post-1990 readiness training methods. The study is limited to unclassified material. Operating platforms and personnel in the San Diego area are the primary source of information.

G. ORGANIZATION OF STUDY

Chapter II provides a detailed background of military medicine in combat. It highlights the stark differences between peacetime and wartime/contingency medical support.

Chapter III presents data from five sources: (1) quotes from Navy leadership are used to give their views of the medical readiness issues; (2) a readiness study conducted at Health Service Support Office, Jacksonville Florida; (3) readiness reports from a major medical command; (4) an interview with Naval Medical Center San Diego's Medical Mobilization officer; and (5) brief descriptions of what other

Navy medicine commands are doing to achieve readiness. This chapter illustrates there is a readiness problem that needs to be addressed.

Chapter IV presents conclusions and recommendations that are derived from the information contained in Chapters I, II, and III. The recommendations are directed towards creating a high level of operational readiness at any command utilizing the existing organizational structure of the peacetime MTF/DTF.

II. MILITARY MEDICINE IN A COMBAT SETTING

Medical care in a combat setting is vastly different than "military medicine" during peacetime. This difference is what necessitates DoD's MRSP, Medical Skills instruction, and the Navy's Medical Augmentation Program. The medical readiness requirement begins with the basic organization and utilization of Navy medical assets during a conflict. This begins with a phased approach to combat casualty care designed to return personnel to their unit as soon as possible. Four levels of medical care are utilized during the treatment and evacuation of casualties. The level of care concept begins with the highly mobile and progresses to facilities that are more sophisticated, less mobile, and farther from the front line. Each level of care has distinct training requirements related to a specific operational platform.

The quandary that Navy Medicine faces is that the spectrum of disease and injuries in peacetime greatly differ from those most common in war. Furthermore, when a predominantly peacetime medical system cannot successfully make an immediate transformation to combat medicine, the consequences could be unfavorable.

A. LEVELS OF CARE

Level I care consists of basic first aid to return the person to duty or emergency life-saving procedures sufficient to stabilize a patient for evacuation to the next level

of care. Procedures performed at this level include intravenous fluid therapy, antibiotic treatments, airway preservation, and the application of splints and bandages. The Navy provides level I care aboard Navy ships and in Marine Corps units positioned as close to the battle area as a tactical situation permits. No surgical care is provided at level I medical facilities.

Level II care consists of general medical and surgical intervention and temporary hospitalization. Blood and blood products are available, as are general surgeons and other medical specialists. The Navy provides level II care aboard aircraft carriers, amphibious assault ships, and within Marine Corps medical battalions.

Level III care consists of resuscitative and definitive health services. At this level, injured personnel are given extended evaluation and treatment in-theater. The Navy provides level III care at fleet hospitals (land-based, state of the art, tented facilities) and hospital ships.

Level IV is longer-term, comprehensive therapy and convalescent care given to patients who require medical support and are not expected to return to duty for an extended period of time. Facilities that offer these levels of care are located outside the area of operations. The Navy provides level IV care at permanent, shore-based hospitals worldwide.

As the level of care increases, so do the training requirements associated with it. Level I care can be performed by a single corpsman that has attended only a basic field medicine course. The training becomes progressively complex as the patient reaches a level IV facility with the multitude of trained technicians required to staff it. The level of care system is designed to treat, and evacuate if necessary, patients with combat injuries; therefore, the following discussion emphasizes those elements of unique wartime medical requirements and problems.

B. MILITARY MEDICINE

Until the Civil War, this country, like most other nations, provided only the very rudiments of medical care for its war victims. Many factors contributed to improved morbidity during the hundred years that followed. The most important of these were the widening frontiers of medical and surgical knowledge, the more extensive and intensive application of information previously gained in the school of experience, and new concepts in handling battlefield casualties. A distinct and fundamental body of knowledge now exist that is unique to military practice and not translatable from the civilian setting. It must be thoroughly understood by all those responsible for the sick and wounded in wartime.

The spectrum of diseases in operational situations differs from those in the peacetime domestic setting. Parasitic-, fly-, tick-, chigger-, louse-, and mosquito-borne diseases must be understood by operational military doctors. Add this to the

list of the various viral hemorrhagic fevers, diarrheal diseases, and the ubiquitous hepatitis virus, and the complexity of the readiness requirements starts to become clear.

The spectrum of injuries is also different in the sphere of military medicine. Without question, these differ from the wounds seen in civilian life from the perspective of the multiplicity of wounds in any given individual, as well as the magnitude of injury. As military weapons become increasingly lethal, the potential exists for these differences to grow even greater. The military medicine specialist must recognize the unique wounding characteristics of high velocity bullets, shrapnel, and mines. Burns are also a common form of injury. The spectrum of burns in the military setting is also different from that seen by civilian physicians. The uniqueness of etiology, and the differing treatment requirements of burns from napalm, incendiaries, flame munitions, and white phosphorus create unique knowledge requirements for military medical specialist. [Ref. 5] In addition, there is an increasing threat of chemical warfare. These knowledge requirements must be acquired and maintained in the most efficient manner possible to ensure readiness. When they are not, the consequences could be severe.

C. GENERAL ACCOUNTING OFFICE REVIEW OF OPERATION DESERT STORM AND IMPROVEMENTS REQUIRED IN THE NAVY'S WARTIME MEDICAL CARE PROGRAM

At the request of the Chairman, Subcommittee on Military Forces and Personnel, Committee on Armed Service, House of Representatives, the General Accounting Office (GAO) [Ref. 6] reviewed the capabilities of Navy medical units that supported Operation Desert Shield and Desert Storm. Specifically, the GAO determined whether the Navy's medical units (1) were prepared to perform their assigned missions, (2) experienced problems in identifying and deploying medical personnel, (3) were staffed with trained personnel, and (4) had their required equipment and supplies.

1. Preparation for Assigned Missions

On 8 August 1990, without warning, the Iraqi Armed Forces struck across the Kuwait border and occupied the country within days. The United States and the United Nations responded. The Navy eventually deployed almost 12,000 medical personnel to support Operations Desert Shield and Desert Storm. Over two-thirds of these personnel deployed to units comprising the second and third levels of the Navy's four-level system of care for war casualties. The Navy demonstrated its ability to rapidly provide significant medical capabilities in-theater. Within 5 days of activation, the hospital ships were deployed and en route to the Persian Gulf where they arrived to treat casualties. The deployment of the fleet hospitals showed that pre-positioned, deployable medical systems could be assembled and fully operational

within a combat zone in about 2 weeks. However, there were some significant problems early in the mobilization.

Navy medical units were given missions by the theater command that they were neither designed, staffed, nor equipped to perform. These missions included handling more casualties than they were designed to handle, providing noncombat medical care, supporting the evacuation of casualties out of theater, and receiving large numbers of chemically contaminated casualties. [Ref. 6]

2. Deployment and Assignment of Medical Personnel

It became evident early on that many augmented personnel were unsure what platform that they were to be assigned to, what they were to bring, or when they would be leaving. They were unaware of the mission, capabilities, and limitations of their assigned platform. There were countless instances of personnel who had been assigned to a platform for which they were not trained. [Ref. 6]

The personnel information systems used to assign individuals to Navy medical units contained incomplete and outdated information. Many physicians and nurses who were scheduled to deploy did not do so for a variety of reasons. Medical facilities are responsible for maintaining an up-to-date readiness checklist for each individual assigned to a deploying medical unit. However, according to Navy officials, some individuals on the rosters were found to be nondeployable for reasons that should have been documented, including illnesses and injuries, pregnancies, and

ongoing legal issues. Many revisions were made to the rosters of personnel who were to deploy during the first phase of the operations. An official at one unit estimated that between one-third and one-half of the assigned personnel were replaced in the three days between the posting of the original roster and the deployment to Southwest Asia. In another unit, over 20 percent of the personnel identified through the augmentation system did not deploy. Although these problems did not ultimately delay the activation of medical units in-theater, they did result in the deployment of some unqualified personnel. [Ref. 6]

3. Training

Many personnel assigned to hospital ships and fleet hospitals arrived in theater without completing necessary operational training. Regarding the fleet hospital and hospital ships, less than 10 percent of Navy physicians who deployed were trained in the treatment of chemically contaminated patients. Less than 20 percent of personnel who deployed with the fleet hospitals had received fleet hospital construction and operation training. Medical personnel said that the fleet hospital training was instructive but should be broadened to offer participants an opportunity to practice medicine under field conditions. [Ref. 6]

Less than half of those assigned to hospital ships had received instruction in firefighting, shipboard orientation, damage control, and chemical, biological, and radiological defense. Another major deficiency during the Gulf War involved the

lack of training and experience in treating trauma patients. Although the physicians and nurses who deployed were described as experienced and competent, many of them had never treated trauma patients, and a majority of them had not completed training in combat casualty care. [Ref. 6]

4. Equipment

Fleet hospitals were equipped with technology from the 1970s and early 1980s. Because of the age of the equipment, most of the personnel assigned to the fleet hospitals had not trained with several unique field pieces of equipment before they arrived in theater. Other problems noted were out-of-cycle calibration of equipment, compatibility problems with supplies, discrepancies between recorded and actual inventories, and equipment and supplies not packed to their manifests. This concern was compounded by a belief shared by many of the physicians, particularly those assigned to the fleet hospitals, that some of the equipment and supplies were of poor quality and did not incorporate technological advances. As a result, several physicians bypassed the official supply system and personally asked medical facilities and private practices in the United States to send specific items directly to them. Personnel also raised concerns about the ability to obtain equipment and supplies necessary to treat mass casualties and to perform other missions. [Ref. 6]

D. SUMMARY

The purpose of this chapter was to illustrate the unique characteristics of medical care in the combat setting. The basic organization of medical care and types and severity of injuries/diseases are very different from what Navy medicine manages in peacetime. As illustrated in section C of this chapter, the transition from peacetime medicine to combat medicine is full of potential difficulties and challenges. The greatest challenge of Navy medicine is to ascertain the ability of a largely peacetime medical system to mobilize and support combat operations. The Medical Augmentation Program (MAP) provides the policy and means to achieve this transition. Chapter III provides a more detailed description of the MAP along with an analysis of its effectiveness.

III. EVALUATION OF THE MEDICAL AUGMENTATION PROGRAM

In this chapter, the effectiveness of the MAP in preparing Navy Medicine for the wartime/contingency mission is examined. Data from multiple sources are used including direct quotes from Navy medicine's leadership, a medical readiness study, training reports, an interview with the Medical Mobilization (MEDMOB) officer at Naval Medical Center San Diego (NMCSD), and some brief descriptions of what some Navy medicine commands are doing in regards to medical readiness. When applicable, the data are compared with the GAO report findings summarized in Chapter II.

As described in Chapter II, the needs of combat medicine are distinctly different from the practice of "military medicine" in the peacetime setting. The fact that most medical personnel are not exposed to this difference until an actual contingency, prevents Navy medicine from genuinely knowing how ready for war it is. Often years, and sometimes decades, go by without a real test of the system. To prepare medical personnel for future conflicts, BUMED has established minimum training requirements that are platform specific. These requirements are designed to give medical personnel a basic knowledge of providing health care in a combat environment. Along with these training requirements, there are personal readiness

requirements that are universal regardless of platform assignment. The policy designed to fulfill these requirements is the Medical Augmentation Program.

A. DESCRIPTION OF THE MEDICAL AUGMENTATION PROGRAM

The Medical Augmentation Program (MAP) is the primary source for guidance in the deployment and assignment of medical personnel. The MAP is organized to carry out its intent in a directive, top down approach. The basic organization is:

Chief, Bureau of Medicine and Surgery (BUMED)

BUMED is overall responsible for:

- Directing, coordinating and monitoring the alert notices and execution of the MAP.
- Monitoring and filling operational and fleet support active duty augmentation requirements as established by the MAP.
- Prescribing readiness training requirements appropriate for the operational platforms supported.
- Monitoring the operational medical augmentation requirements of each augmentation receiving unit by designator and specialty. Matching augmentation receiving unit requirements with augmentation source unit resources and coordinating taskings through Navy Health Care Support Offices (HSO) to meet the requirements.

Navy Healthcare Support Offices (HSO)

The HSOs are responsible for:

- Coordinating assignment of CONUS MTF and DTF personnel to MAP receiving units.
- Monitoring training status of individuals assigned.
- Performing annual readiness reviews of, and assist visits to, CONUS MTFs and DTFs to verify MAP readiness posture and overall program conformity.

Medical and Dental Treatment Facilities (MTF/DTF)

The CONUS MTFs and DTFs are responsible for:

- Assigning and notifying qualified individuals of their mobilization assignments.
- Bringing each member to C-1 (the required level) status within 60 working days of assignment to an augmentation platform.
- Maintaining a command data base that will satisfy all information requirements listed in the MAP.
- Submitting readiness reports to the HSO, as directed.
- Developing a detailed standard Operating Procedures manual that details all phases of augmentation.
- Establishing a mechanism for entry and exit interviews to review records for MAP assignment information, initiate the readiness checklist process, or remove personnel from MAP assignment.
- Assigning personnel to BUMED directed readiness training.

At the MTF/DTF level, execution of MAP requirements is the responsibility of the Plans, Operations and Medical Intelligence officer (POMI). The POMI's department/division is commonly referred to as Medical Mobilization (MEDMOB). An excerpt from a BUMED Medical Readiness Division memo sent to all Navy medical commands gives a good description of the POMI's day-to-day routine:

Take a moment to consider the size of your command and the relationship it has to the assets you have placed against that for the accomplishment of the readiness mission. We expect those people to track the entire membership of the active duty force. We expect them to coordinate their efforts with education and training, manpower, the HSOs, the readiness platform commands and BUMED. We expect them...reporting on a multitude of data streams to enable the reporting of the readiness status of our personnel and thus our capability of support to the CINC's requirements. We expect them to be responsive to the demands of the staff for moves from platform to platform; to reasons for non-conformance with required training or administrative readiness items; and to chase down the staff when necessary. [Ref. 7]

As stated above, the POMI is expected to track the entire membership of the command's active duty force. This refers to all individuals at a command assigned to an operational platform. At Naval Medical Center San Diego, for example, there are 2000 personnel assigned to 24 operational platforms. These personnel are tracked by a staff officer who basically must request (as opposed to having authority) that personnel meet their readiness obligations. The system is large and with personnel changing duty stations on an average of every three years, very dynamic.

1. Personnel Readiness

The POMI is required to maintain and update an Individual Readiness Checklist (IRC) for all command personnel once a platform assignment is made. These checklists are designed to be inclusive and monitor such things as whether or not personnel are physically and dentally qualified, up to date on required immunizations, have a valid identification and Geneva convention card, dog tags, pay and accurate personnel records, up-to-date emergency data, powers of attorney, wills, etc. This part of the MAP is formally referred to as an individual's C-status. Varying degrees of compliance will define an individual's C- status as C-1, C-2, C- 3, or C-4. Per current instruction, all augmentees must be maintained at a C-1 status. Table 1 shows the percentages of readiness items that must be obtained to maintain each C-status. All personnel assigned to a platform are required to be C-1 within 60 days of being assigned to a platform.

Table 1. C-Status Readiness Percentages

C-0	on board less than 60 days
C-1	greater than 90% complete
C-2	greater than 75% complete
C-3	greater than 60% complete
C-4	less than 60% complete
C-5	administratively not qualified (LIMDU, legal)

Source: Bureau of Medicine and Surgery Instruction 6440.5A.

No individual can be assigned to more than one operational platform. All command personnel are eligible for assignment except the CO, XO, Command Master Chief, POMI staff, and nondeployables (pregnant, limited duty, etc.).

2. Training

Navy Medicine's most important role is to provide appropriately trained personnel to support the combat forces. The responsibility to ensure a ready force ultimately lies with the commanding officer of each installation. Each individual assigned to a platform also has a responsibility to maintain personal readiness.

The MAP has an extensive list of training courses that must be completed before a person is categorized as "Ready for Deployment." Training requirements for augmentees differ by platform. Varying degrees of compliance will define an individual's training status as T-1, T-2, T-3, or T- 4. All personnel assigned to a platform must be T-3 or better (completed at least 55 percent of the training requirements). Table 2 shows the percentage of training requirements that must be completed to maintain a required level of T-status.

Table 2. T-Status Readiness Percentages

T-0	on board less than 60 days
T-1	greater than 85% complete
T-2	greater than or 70% complete
T-3	greater than or 55% complete
T-4	less than 55% complete
T-5	no training required (not assigned to a platform)

Source: Bureau of Medicine and Surgery Instruction 6440.5A.

MTFs/DTFs are directed to budget for and execute readiness training consistent with BUMED direction and requirements listed by the MAP. Upcoming training events and courses are largely the responsibility of the individual to seek out and attend. The MAP does not direct formulation of a command readiness training plan nor does it require formal indoctrination of mission, capabilities and organization of assigned platform.

3. Activation of the MAP

In the event of a partial or full-scale mobilization, each platform draws its personnel from a specific augmentation sourcing unit. The textbook definition of the MAP identifies it as "The process by which wartime medical requirements are filled by active duty personnel with the required officer and enlisted specialties to bring the units to their full or partial wartime medical allowance." [Ref. 1]

In order to have MAP personnel activated, the Chief, Bureau of Medicine and Surgery receives alert and activation orders from the Chief of Naval Operations. Potential augmentation personnel are notified via their POMI. Communication between specific augmentation receiving units and sourcing units determines mix and number of personnel to be augmented. Transportation arrangements to the receiving unit are the responsibility of the parent command. Reporting responsibility belongs to the receiving unit once the augmentee arrives.

B. ANALYSIS OF THE MEDICAL AUGMENTATION PROGRAM

In order to evaluate the MAP, it is necessary to examine the ultimate outcome of the program, that is, readiness. Is Navy Medicine ready?

1. Assessment of Military Leadership

Vice Admiral Hagen, the previous Navy surgeon general, said in testimony before the Senate Appropriations defense subcommittee,

Readiness remained the *raison d'être* for Navy medicine. Successful deployments to Haiti, Guantanamo Bay, Cuba and Croatia are all evidence of how well prepared Navy medical personnel are. [Ref. 8]

Not discounting these successful deployments, the term "readiness" must be associated with "responsiveness." The above statement characterizes deployments made with ample time to prepare and/or humanitarian in design. Although humanitarian missions are part of the wartime/contingency mission, the readiness goal for

Navy medicine must be to respond to a Major Regional Conflict with no preparation time. In part, the National Strategy on Major Regional Conflicts states, "The United States must have forces that can deploy quickly and supplement U.S. forward deployed forces." [Ref. 2]

In stark contrast to Vice Admiral Hagen's testimony is a letter from the editor of the Medical Service Corps Professional Bulletin. It states:

The Surgeon General exposed Navy Medicine to the 'deck plate' requirements of General Krulak, Commandant of the Marine Corps and VADM Prueher, Vice Chief of Naval Operations. They believe we do well in the delivery of health care; they have concern with our operational capability, training, and perhaps "day-to-day" policies in delivering it. [Ref. 9]

These two officers are the top leadership that represent the Navy and Marine Corps team. The assumption could be made that if they have a concern, there is a problem. Also, this underscores the sense of urgency that permeates through the articles and reports reviewed for this study.

Because of a significant increase in missions, Navy medicine may be called on to support, there is intense pressure to improve readiness quickly. Along with this increase in missions, there are the issues of "rightsizing" and managed care. The loss of health care providers for extended periods of time to accomplish operational training requirements is not conducive to the current focus of continuity of peacetime

care at Navy MTFs and DTFs. Underscoring this sentiment, RADM Wright, Medical Officer of the U.S. Marine Corps, states:

There has been tension in the system between investing in readiness and providing health benefits. Aggravating that tension, hospital commanders have been pushed to reduce civilian provided health care costs. Whatever time doctors, nurses, and other providers spend on wartime training...such as deployment exercises aboard a hospital ship...forces patient referrals out of the military system, consequently driving up those costs. The Navy is currently wrestling with the appropriate balance and how to assess and monitor personnel and wartime readiness. [Ref. 8]

The above statement very eloquently states that readiness will have to be achieved without an increase in training time or budget. With the managed care initiative, readiness training often will be perceived and treated as overhead. The loss of a health care provider to undergo readiness training is strictly a loss to the system with no immediate benefit.

Further evidence that all services are under pressure to improve medical readiness training despite "rightsizing" comes from Dr. Edward Martin, Principal Deputy to the Assistant Secretary of Health Affairs, he states:

An unprecedented, joint 'sizing model' being developed will likely produce cuts, however, whatever the optimal size is deemed to be, readiness training will have to keep improving. The pressure is inexorable. [Ref. 8]

This information demonstrates that, (1) there are concerns with Navy Medicine's operational capability, (2) the Navy is wrestling with the appropriate balance of how to assess and monitor personnel and wartime readiness, and, (3) the pressure to keep improving is inexorable. All this despite Vice Admiral Hagen's testimony that Navy Medicine is ready. Where do these trepidations come from? The next section offers data that may explain some of them.

2. Readiness Data

a. HSO Study

A summary of a study conducted in 1995 by the Jacksonville Health Service Support Office is presented. [Ref. 10] This study analyzed C-status (personal readiness) and T-status (training requirements completed) of 5273 active duty medical personnel at eleven MTFs and DTFs within their area of responsibility. A survey questionnaire was sent to the Medical and Dental Treatment facilities with every tenth name of an alphabetic list used to evaluate information collected and reported by the system. Table 3 summarizes the results from this study.

Table 3. Personnel Readiness Surveyed by Jacksonville HSO, 1995

C-STATUS	NUMBER OF PERSONNEL	PERCENTAGE
C-0	371	7
C-1	159	3
C-2	3	0
C-3	0	0
C-4	4199	80
C-5	541	10
Total	5273	100

Source: HSO Jacksonville study [Ref. 10].

Table 4 shows T-status results from the same study.

Table 4. Training Status Surveyed by the Jacksonville HSO, 1995

T-STATUS	NUMBER OF PERSONNEL	PERCENTAGE
T-0	91	2
T-1	42	1
T-2	7	less than 1
T-3	14	less than 1
T-4	2248	43
T-5	2871	54
Total	5273	100

Source: HSO Jacksonville study [Ref. 10].

The hypothesis prior to conducting the study was that medical personnel located in the Southeastern United States (area of study) had attained high levels of readiness. The researcher's conclusion at the completion of the study was:

The hypothesis was not confirmed. By examining the statistics generated...only 162 people or 3 percent are C-1 or C-2 or have at least 75 percent of their readiness and training qualifications.... [Ref. 10]

By the researcher's own admission, the reliability of this study is in doubt. The researcher states:

The Medical Augmentation Program is an unreliable instrument used today to measure the overall readiness for this area of responsibility. There is a substantial amount of erroneous data that is reported in the system.... [Ref. 10]

On the validity of the study, the researcher states:

The face (or content) validity or overall judgement made on the overall appearance of the statistics is in doubt.... [Ref.10]

Taking into account the comments of low validity and reliability about the study, the current status of readiness is fundamentally unknown for the commands represented by these data. However, such low statistics, and uncertainty itself, are sufficiently alarming to warrant close examination of the system.

The researcher's concern is further reflected in a BUMED letter requesting a readiness assessment from Navy medical commands. It states:

Readiness is the highest priority in Navy Medicine. I request your assistance in performing a comprehensive readiness assessment of your command in the areas of equipment, personnel, and training...I would like your review of the training needs of all individuals with a readiness responsibility.... This would include, but not necessarily be limited to, basic life support, advanced life support, C-4 and, where appropriate, training in damage control, firefighting, etc., for those assigned to shipboard platforms.... [Ref. 11]

What is being requested in the above excerpt are requirements that are delineated very clearly in the MAP. This information should be available if the instructions within the MAP were being carried out.

b. Sample Command Data

Every MTF and DTF are required to maintain readiness data reflecting C and T status. The following discussion involves readiness data obtained from another major command to illustrate the type and percentages of readiness training measurement that are being reported. Scope of the data is limited to requirements that require training 100 percent of assigned personnel. This illustrates trends of increasing or decreasing medical readiness. Table 5 shows hospital ship readiness percentages reported in 1996 and the results of the GAO report discussed earlier. The four training requirements, damage control, firefighting, ship orientation, and Nuclear,

Biological and Chemical/Chemical, Biological and Radiological Course (NBC/CBR-D) are the core courses for personnel assigned to the hospital ship. The MAP requires 100 percent of assigned personnel trained in these areas.

Table 5. Hospital Ship Training Requirement and Percent Trained in 1996 Compared with GAO Report, 1993

TRAINING REQUIREMENT	GAO REPORT PERCENTAGE TRAINED (1993)	PERCENTAGE TRAINED (1996)
Damage Control	50	25
Fire Fighting	50	29
Ship Orientation	25	57
NBC/CBR-D	50	7

Source: Naval Medical Center San Diego and GAO Report [Ref. 6].

This table demonstrates a decline in training for three of the four requirements.

Table 6 provides training requirements for fleet hospital personnel and percentages trained. Fleet hospital training-phase 1 (FH-1), phase 2 (FH-2), and NBC/CBR-D are required for 100 percent of assigned personnel. Casualty Care (C4) is required for all assigned medical department officers.

Table 6. Fleet Hospital Training Requirement and Percent Trained in 1996 Compared with GAO Report, 1993

TRAINING REQUIREMENT	GAO REPORT PERCENTAGE TRAINED (1993)	PRESENT PERCENTAGE TRAINED (1996)
FH-1	20	28
FH-2	20	7
NBC/CBR-D	---	5
C4	---	20

Source: Naval Medical Center San Diego and GAO Report [Ref. 6].

Consistent with Table 5, this table demonstrates a low percentage of training completed. The hospital ship and fleet hospitals are expensive, highly capable operational platforms, but, as the GAO report pointed out, Navy medicine lacks trained personnel to man them.

Table 7 illustrates training requirements for Fleet Marine Force (FMF) personnel and percentages trained. Training requirements for the FMF platforms are different for officers and enlisted. Officers attend a Medical Department Officer Course designed to indoctrinate them about the FMF. Enlisted attend Fleet Marine Service School (FMSS) to give them a basic overview of field medicine. The casualty care course is the same as the fleet hospital requirements in that only medical department officers are required to attend it. NBC/CBR-D training is required by all

assigned personnel. The 1993 GAO report did not report on the FMF specifically. The four areas illustrated in Table 7 require 100 percent of the assigned personnel trained. All four requirements illustrate a low readiness status consistent with previously presented data.

Table 7. Fleet Marine Force Training Requirement and Percent Trained, 1996

TRAINING REQUIREMENT	PRESENT PERCENTAGE TRAINED
Casualty care	45
NBC/CBR-D	19
FMSS	62
MDO	22

Source: Naval Medical Center San Diego.

The data from the HSO study and the command sample clearly demonstrate that at a minimum, Navy medicine is less prepared now than reported by the GAO after the Persian Gulf War. Also, the questions about validity indicate an inability to ascertain true readiness status. And, if the data were considered accurate, it clearly demonstrates an alarming trend of non-compliance in regards Navy medicine's primary mission.

C. NAVAL MEDICAL CENTER MEDICAL MOBILIZATION OFFICER INTERVIEW

An interview with the POMI at Naval Medical Center San Diego was conducted in January 1996 to acquire an understanding of how the readiness process is managed at Navy medicine's largest facility. Three questions were used to ascertain how the command meets the requirements of the MAP. Supporting 24 different operational platforms with over 2000 personnel, it is arguably the military's largest and most dynamic medical center.

1. **What are the processes for assessment and tracking of C-status/T-status in regards to the five requirements as set forth in the MAP?**

This question is further divided into the five parts that reflect the requirements of the MAP.

a. **Data required for the Individual Readiness Checklist (IRC) will be collected and maintained for each augmentee.** The POMI said that MMPO does maintain an IRC on each augmentee. However, there is no set process to ensure the accuracy and update of this document. He said that lists reflecting C-status are sent to departments but there is no mechanism for feedback. He continuously notifies departments of their deficiencies, but because nothing compels them to correct and notify him of any corrections made, it continues to be a struggle.

b. **This information will be verified at least annually.** The POMI said that he currently does not verify IRCs on an annual basis but more on an "as

needed" basis. Also, he has no set process for the systematic review and oversight of the IRC. It is usually done only when an exercise, such as a USNS Mercy training evolution, is conducted.

c. **All personnel will be screened for previous MAP assignments and their ability to fill vacant requirements.** The POMI said that the majority of assignments are done by automatic matching of the operational assignment and the required Navy Enlisted Code (NEC) and Navy Officer Billet Code (NOBC). He said the number of check-ins and check-outs greatly exceeds his ability to sit down with each individual and extract needed information. Also, the information doesn't exist on any type of document used during the check-in process.

d. **Members will be brought to a C-1 status within 60 days of assignment.** The POMI said that rarely is an individual brought to a C-1 status within 60 days. He said it becomes a game of notification of discrepancies with no oversight or feedback mechanism to see if it is accomplished. Only when the individual goes to the required place (sickcall, legal) and fulfills the requirement does he or she get feedback, and that is not guaranteed. He gave an example of an individual going to sickcall to get a required immunization. Sickcall must enter this immunization into a specific data base it can be downloaded onto his system. If this is not done, there is no way of knowing whether or not the individual fulfilled the requirement since he

doesn't receive any feedback on the rosters of discrepancies he sends out on a periodical basis.

e. **Mechanisms will be in place to identify and review for appropriate command disposition when a members C-status is less than a C-1 status.**

The POMI said that past efforts to review a member's C/T-status faded away as the validity of the data base decreased. Leave/TAD requests were used as a mechanism for checking a member's C/T-status in the past but this was discontinued as a result of an unreliable data base.

2. What are the current relationships between MEDMOB, Operational Platforms, Department Heads, the Commanding Officer and the Operational Readiness Quality Management Board (QMB)?

The POMI said that the USNS MERCY is the only platform that has an organizational structure physically located at NMCSO. All other platform command structures are located on the platform with NMCSO strictly being a personnel resource. He said the Commanding Officer of the USNS MERCY utilizes the MMPO to coordinate exercises and training events and he acts in a support role to assign and notify personnel. He said that rosters of assigned personnel and their C/T-status are sent from MMPO to the USNS Mercy chain-of-command as requested. But, just as he lacks the authority to effectively notify an individual of a requirement and ensure it is carried out, so does the Commanding Officer of the USNS Mercy. The chain of

command of the USNS Mercy is different from the chain of command of Naval Medical Center San Diego and thus lacks any real authority to effect requirements.

The POMI said all other operational platforms have a senior officer assigned as the Senior Platform Leader for their particular platform. He said that no roles or responsibilities are delineated and the platform senior officer initiative gradually ceased to exist.

The link to the Commanding Officer is through an Executive Steering Council (ESC) chartered Operational Readiness Quality Management Board (QMB). Nobody on this QMB is tied to the readiness process. The POMI said this QMB has an ad-hoc relationship with MEDMOB. As the QMB request information, he provides it. The POMI said there are no recurring reports to higher authority within the command that relate to the status of the Medical Center's operational readiness.

3. What are the responsibilities and chain of command for each operational group as it pertains to readiness? Do any policies, guidelines, or instructions delineate accountability?

The POMI said there is no NMCS instruction that delineates operational readiness policy, guidelines, or accountability. The methods to attain a C/T-1 status are on the back of the check-in document provided by MMPO at the time of assignment. Assumptions are made that an individuals will be proactive and ask, receive direction, and accomplish the necessary items to become C/T-1. He said the assignment letter directs the member to report to MMPO and, at that time, training

and personal items are explained. There is no system in place to ensure the member reports to MMPO or follow-up procedures to recall members, if they don't show up.

The POMI said that current guidelines contained in the MAP state that key command personnel for fleet hospitals and hospital ships shall meet regularly to delineate training, organization, goals and objectives, and to prepare reports as required by higher authority. The USNS Mercy command personnel do meet and discuss the above items. However, he said the thing to remember is that along with the USNS Mercy, he has 23 other platforms and another 1200 personnel assigned to platforms. These platforms also need to have some type of organization to provide oversight and guidance.

D. NAVY MEDICINE COMMAND READINESS INITIATIVES

There are numerous innovative approaches to medical readiness throughout Navy medicine. For example, some were described in the Force Report [Ref. 12], a quarterly Bureau of Medicine and Surgery publication aimed at communicating ideas and information throughout Navy medicine. Some Naval Hospitals are tying personnel mobilization requirements with the member's birth month. On the birth month, the member's record is reviewed, shots obtained and any further administrative paperwork such as "page two" (personal emergency data) corrections and wills are completed.

Other commands are holding mobilization platform-specific stand downs and training to get all personnel familiar with their shipmates and the requirements for the specific platform. Stand downs are usually held in the uniform that will be worn on the mobilization platform. Many commands have tied TAD, special liberty, leave requests, advanced bonus requests, tuition assistance and other special requests to C-status.

At the Naval Hospital Patuxent River, the Commanding Officer assigned a senior member from the command to each mobilization platform. That member is responsible for the readiness of the junior personnel assigned to the platform. At Naval Medical Clinic Quantico, the Commanding Officer is holding Department Heads personally responsible for the C-status of their personnel. The readiness of their staff is linked to their fitness report.

The command at Naval Hospital Rota recently held a C-1 Status Fair. On one of two days, everyone at the command had to show up, verify their health record, update shots on the spot, schedule a physical exam if required, and attend to any other requirements that were due. All of this was done through a single stop. The success rate was very high, and only a few stragglers had to be located. At Naval Hospital 29 Palms, the command has begun giving the Chief Petty Officers (CPOs) a report on what platform they are assigned to, what enlisted are on the same platform, and the

C-status of the personnel. This allows the CPOs to track their people and get them to C-1.

These approaches have been developed in response to the clear-cut need for attaining a high state of operational readiness throughout Navy medicine. However, with no uniform approach to the accomplishment of medical readiness requirements, there can be no consistency in the results. All the methods described above are dependent upon the leadership of the command and their presence for any continuity. They demonstrate a sporadic, non-sustainable, non-system oriented approach to medical readiness.

E. SUMMARY OF ANALYSIS

The primary purpose of this chapter was to illustrate that there is ample reason to be concerned with the medical readiness of Navy medicine. The concerns and thoughts of top leadership are supported by the data from the HSO study [Ref. 10] and command training percentages. Review of the data supports the notion that the deficiencies of the Persian Gulf War continue to affect Navy medicine today. This is illustrated in the lack of any organizational structure to notify and receive feedback on readiness- related issues, and no representation or reporting within the command.

MTF/DTFs approach meeting readiness requirements differently because BUMED allows significant latitude on how to carry out the intent of the MAP. The

data in this section indicates that medical readiness in the Navy has not improved since the Persian Gulf War, and there is every indication it has become worse.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

The Medical Augmentation Program (MAP), as written, is not effective. This is illustrated by the fact that the state of medical readiness throughout Navy Medicine is lower now than reported by the GAO in 1993. The data presented in Chapter III clearly illustrates this fact through four different sources: (1) top leadership's reservations on Navy Medicine's operational ability, (2) HSO and command data that demonstrate low readiness statistics, (3) a POMI's frustration on getting anything accomplished because of the lack of command participation, and (4) a variety of temporary methods to accomplish Navy medicine's most important mission.

As clearly stated by the Navy's Surgeon General in the MAP [Ref. 1], Navy medicine's primary responsibility and most important mission is to provide combat-ready professional medical personnel to support the Operating Forces of the Navy and Marine Corps team. Can Navy Medicine meet this expectation? Yes, however, responding in a timely and knowledgeable manner is in doubt. The low readiness statistics equate to numerous requirements an individual must accomplish prior to deploying to the theater of operations. Navy Medicine must prepare for a Major Regional Conflict in progress with medical support required immediately. The presumption must be that there will not be time to figure out the equipment that is

significantly different than that used in peacetime, no time to understand the mission and the delivery of healthcare that goes with it, no time to que up in long lines and take care of some basic personal necessities such as power of attorney, wills and immunizations. But, the most obvious problem of all is that medical readiness requirements are determined by higher authority and as Chapter III illustrates, Navy medicine doesn't come close to fulfilling them.

The question, then, becomes what does Navy medicine need to do to increase medical readiness? This analysis shows that two issues must be taken into account. First, we must consider the first part of the readiness definition: "the ability to mobilize, deploy and sustain field medical services for any operation requiring military services." "To mobilize and deploy" means the ability to move from the peacetime setting to the operational setting. This is best achieved when the member is personally ready and has preconceived notions of what it is he/she will be doing upon arrival. Being personally ready is measured by C-status and being familiar with the operational environment. To be familiar with the operational environment requires constant learning and reinforcement of even the most basic concepts. But, before Navy medicine can expect to confront the more complex readiness issues of combat medicine, it must take care of the very basic needs measured by the C-status.

Next, although the MAP is concise in its requirements, it lacks accountability and a viable means to effect command involvement and commitment. To achieve this

the program must be organized into manageable components at the MTF/DTF level. A good illustration of where this would be best applied is Naval Medical Center San Diego. With sole responsibility to assign and track over 2000 medical personnel to operational platforms, the POMI has been reduced to becoming a data base manager. Centrally organizing the program in this manner inhibits active participation by anyone other than the POMI staff. There is no way for someone's opinion or idea to get into the readiness system and be noticed. Finally, command-wide involvement is paramount if a sustainable outcome is to be achieved.

B. RECOMMENDATIONS

There should be a uniformly organized medical readiness process at each Navy medicine command. This is especially vital as Navy medicine moves towards what is referred to as the "Component Unit Identification Code" (component UIC) concept. This is a separate UIC that identifies an individual's assigned operational platform. Individuals will know what their platforms are prior to reporting to the MTF/DTF. This is the first implementation of the THCSSR model discussed in Chapter I.

The following five recommendations are designed to create a framework for a viable readiness organization. This readiness organization will parallel the existing MTF organization and require no additional manpower or funding. These recommendations are designed to be implemented throughout Navy medicine through inclusion of a revised MAP instruction.

The first three recommendations increase command involvement through active participation with the readiness process. Every position described will focus on a specific area of responsibility and contribute to the overall goal of a high level of sustained readiness. And, most importantly, it allows the system to move towards a state of continuous improvement.

The last two recommendations will satisfy a real need to provide basic readiness orientation to all command personnel and to establish roles and responsibilities for all participants in the readiness process. This is important to ensure the readiness process continues as command leadership changes.

1. Decentralize the Medical Readiness Process at the Command Level

This could be accomplished by appointing Senior Enlisted Leaders (SEL) as Readiness Coordinators for their directorate. By virtue of the military organization, all commands have senior enlisted at the top of each chain of command within the organization. The purpose is to decentralize the process and allow for communication of readiness requirements in a systematic and manageable method. This will ensure that department heads within a given directorate are duly notified of all readiness-related items in a timely and efficient manner. In turn, the department heads will have knowledgeable individuals to assist them during the execution of such items.

This is an appointment of a position, not an individual. The SEL should be a permanently assigned position at the top of each chain-of-command with definitive

span of control and accountability. Additionally, this will lend continuity to the readiness function as the SEL is replaced and the function is transferred to the next assigned person.

The Readiness Coordinators should participate in a continuous verification of the operational readiness data base maintained by MEDMOB. This can be accomplished by a review of platform assignments and training needs on a monthly or as-needed basis to ensure its accuracy. By utilizing this part of the organization, accomplishment and verification of C/T status can be reduced to a manageable level.

MEDMOB should continue to obtain training quotas and coordinate training exercises. Training quotas should be managed based on the demand to fulfill the related requirement and final selection for attendance should be managed by the affected individual's department/directorate. This will allow the end users of the training to actively participate in the formulation of the training plan since their department will participate in their selection. An overall philosophy of getting the right person to the right training at the right time is the focus of this effort.

2. Assign a Platform Operations Officer along with a Senior Officer to Each Operational Platform Group the Command Supports

The MAP requires the senior officer/enlisted of deployable platforms to meet frequently for the purpose of training, organizational administration, establishing goals and objectives, etc., and to report issues and concerns to BUMED via the chain

of command. This should be taken one step further with the assignment of an operations officer for each group of platforms. This individual would become the command expert for a specific group of operational platforms. The primary functions are to oversee the readiness of personnel assigned to that group of platforms and assist MEDMOB in the formulation and preparation of platform specific plans and policies.

The Platform Operations officers should be required to report the readiness status of their assigned platforms to the Commanding Officer on a regular basis. This would interject a continuous improvement function into the readiness process through independent oversight.

Additionally, this individual should represent the command in collaboration with operational platforms to develop training opportunities and exercises. Operational platform groups, at a minimum, should include; Fleet Marine Force, Casualty Receiving Treatment Ships, hospital ships and Mobil Medical Augmentation Readiness Teams.

The Platform Operations officer should be selected on the basis of prior experience and personal motivation for the position. Optimally, this should be a non-clinician to minimize time away from patient care. In addition, the officer need not be assigned to the platform. This will ensure the command utilizes the talent of the best qualified and motivated person.

3. Establish a Quality Management Board (QMB) That Represent the Positions Responsible for the Readiness Process

This QMB should be composed of personnel who are jointly responsible for the readiness process. The membership would be cross-functional and, at a minimum, should include Platform Operations officers, a representative Readiness Coordinator, the MEDMOB officer and a department head (to represent their interests). This QMB should develop the process improvement plan for the command's overall readiness objective.

4. Develop a Comprehensive Platform Indoctrination

This would satisfy a major requirement of the DoD Medical Skills instruction discussed in Chapter I. Specifically stated, "Healthcare personnel shall receive an orientation to the member's assigned billet for mobilization or deployment and an annual operational unit mission briefing."

The core curriculum should be oriented to the assigned member's operational platform Billet Sequence Code (BSC). The BSC identifies the responsibilities of the member on the operational platform, and this often does not correspond to the member's assignment at the MTF in peacetime. When the receiving operational platform requests augmentation it will request it by BSC. Topics should include:

- The mission, capabilities, and limitations of all operational platforms Navy Medicine is responsible for augmenting. To truly understand a specific operational platform, an understanding of the entire spectrum

of medical support to the combat forces is necessary. This would bring an understanding of how the physical environment of a level of care corresponds with the equipment and materials provided to support it.

- A walk through of a typical augmentation process. Starting with what happens at time of notification right through to full mobilization supporting global warfare. Walk an individual through the process from work center to his/her position on the platform and back home.
- The concepts and philosophy of combat triage and medical regulation as they relate to every platform Navy medicine supports. This should be completely didactic and not intended to replace the traditional hands on triage courses.

The above information should be provided during an annual readiness update session for each platform group a command supports. This would be accomplished through coordination with the MEDMOB, Platform Operations officer, gaining operational platform, and Staff Education and Training. It should be given throughout a designated training month to minimize loss of clinical time and to ensure personnel on TAD/leave/other commitments attend the training. This would be no longer than one day in length.

5. Every Command Promulgate its Own Operational Readiness Instruction

The purpose of this would be to bring all aspects of the readiness function into one locally relevant document. This should ensure the readiness process continues throughout personnel changes and keeps the process active. It should clearly define roles, responsibilities, and relationships of the operational readiness QMB, Platform

Operations officers, MEDMOB, Dental, Staff Sickcall, etc. This instruction should reference DoD and BUMED for identification of requirements.

C. SUMMARY

The solution for ensuring medical readiness is the commitment of its personnel. This commitment can not be dependent on leadership alone. An organizational structure must be in place with roles, responsibilities and measurement.

The above five recommendations would create this organization along the lines of any existing Navy medicine command but are specifically designed for Navy medicines three largest MTFs, Naval Medical Centers San Diego and Portsmouth and Naval Hospital Bethesda. These commands will continue to support multiple operational platforms throughout the "rightsizing" of Navy medicine.

LIST OF REFERENCES

1. Bureau of Medicine and Surgery Instruction 6440.5A, *Medical Augmentation Program*, 19 April 1994.
2. Department of Defense, *Medical Readiness Strategic Plan 1995-2001*, March 1995.
3. Weber, Timothy H., *The THCSRR Model: Determining Navy Medicine's Readiness Manpower Requirements*, Navy Medicine, September-October 1994.
4. Department of Defense Instruction, Number 1322.24, *Medical Readiness Skills Training*, 20 December 1995.
5. Smith, Arthur M., "Let's Get Realistic About Medical Preparedness for War," *Navy Medicine*, May-June 1989.
6. General Accounting Office, *Operation Desert Storm: Improvements Required in the Navy's Wartime Medical Care Program*, July 1993.
7. Bureau of Medicine and Surgery, *Readiness Improvement*, Memo, 22 November 1995.
8. Nelson, Soraya S., and Jon R. Anderson, "The Next Battle," *Navy Times*, July 1995.
9. *Medical Service Corps Professional Bulletin*, December 1995.
10. Gonzales, Richard, "The Naval Medical Augmentation System," Naval Healthcare Support Office, Jacksonville, FL, 1995.
11. Bureau of Medicine and Surgery, *Readiness Assessment Survey*, Letter, 29 June 1995.
12. *Force Report*, Bureau of Medicine and Surgery, April - June 1996.

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center 2
8725 John J. Kingman Road, Suite 0944
Fort Belvoir, VA 22060-6218
2. Dudley Knox Library 2
Naval Postgraduate School
411 Dyer Road
Monterey, CA 93943-5101
3. Navy Manpower Analysis Center 1
Code 531
NAS Memphis
5820 Navy Road
Millington, TN 38054-5056
4. Prof. Alice Crawford (Code SM/Cr) 1
Naval Postgraduate School
Monterey, CA 93943-5103
5. CAPT J. A. Scaramozzino (Code 65) 1
Naval Postgraduate School
Monterey, CA 93943-5100
6. CDR 2
Navy Medical Center San Diego
Code RDA (HRMD) LCDR Boufford
34800 Bob Wilson Drive
San Diego, CA 92134-5000